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Abstract

The primary purpose of this research was to examine distribution, inventory management and distribution requirements planning practices in the context of pharmaceutical manufacturing. The research questions are descriptive by their nature. The descriptive approach was chosen because of the nature of real-life situations and practical aspects of distribution requirements. The research data consists of the two largest Finnish pharmaceutical manufacturers. The study uses both within-case and case-comparison analyses. Therefore, it is unique in comparing two pharmaceutical manufacturers in Finland. The research was conducted using qualitative methods, which is understood simply as a description of empirical evidence and its analysis.

The first research question examines how pharmaceutical distribution is managed from the pharmaceutical manufacturer's point of view. The research results clearly show the control of the authorities on the distribution of pharmaceuticals. Therefore, the used distribution channels do not differ between the analyzed companies. Nevertheless, companies are seeking efficiency in their distribution operations. However, there is a lack of flexibility, as it is not possible to move the production or the distribution of goods to other manufacturing units. The most important metric used to control distribution operations is delivery accuracy.

The second research question is concerned with inventory management in pharmaceutical manufacturing. Inventory management was examined through defining the purpose of inventory and related management techniques. The results show that the inventories are looked at from a sales and image point of view and they are needed mainly to adapt to the changes in demand and to ensure accuracy in deliveries. Inventory techniques are acknowledged but they are not always used. This is mainly because of the authorities' requirements or quality control. The study also includes examples of economic packing size calculations using the Wilson formula.

The third research question discusses the objectives of the distribution requirement planning (DRP) technique. The results show that the objectives of DRP have to be accurate in order to be able to work effectively and to adapt to changes in demand. The enterprise resource systems often support the technique, which is helpful in seeking efficiency in operations. In the future, it would be interesting to compare different distribution requirement planning objectives between companies from different industries or different levels of DRP use.

Key words	Distribution, Inventory management, Pharmaceutical industry, DRP, EOQ
Further information	

